

Project ref:

2234

Project Name:

Proposed Sixth form extension, Alexandra Park School

Date: 25/09/2023

SUSTAINABILITY STATEMENT

This sustainability statement has been prepared for proposed expansion of sixth form accommodation at Alexandra Park school. It is to be read in conjunction with Thinking Buildings' Design and Access Statement, Edgar's Planning Statement and the CBG's Energy Statement.

A. Energy & Carbon

1. Carbon emissions and energy consumption target

Carbon Reduction

The building has been designed to meet a very high standard of sustainable design. The proposed design will achieve a minimum 35% carbon reduction on Part L 2021 of the Building Regulations in accordance with London Plan Policy SI2.

Dynamic thermal modelling has been undertaken and a BRUKL report is included within the application with the proposed design achieving a 37% carbon reduction on Part L 2021. The proposal therefore does not require any off site carbon offsetting.

An Energy Assessment and the GLA's Carbon Emission Reporting Spreadsheet is submitted as with the planning application.

EUI Targets

The Energy Use Intensity (EUI) and space heating demand has been assessed and is included within CBG's Energy Statement. The planning policy target is 65 kWh/m²/year EUI target.

The preliminary assessment indicates that the proposed building meets an EUI target of 26 kWh/m²/year and a space heating demand of 4.7 kWh/m²/year (Excluding renewable energy).

Fabric Efficiency standards

The building design includes high levels of fabric insulation and air tightness resulting in a 37% carbon reduction on Part L 2021 Building Regulations requirements. The building has been designed with reference to the LETI Climate Emergency Design Guide principles. The building

includes an appropriate amount of glazing to balance requirements for heat loss, heat gain and daylight without the need for any air conditioning or cooling systems.

Ventilation:

The building includes Natural Ventilation Heat Recovery Units (NVHR) within teaching spaces and a Mechanical Ventilation Heat Recovery (MVHR) in the larger social space. Classrooms include manual opening louvred panels to admit large amounts of free area for summer time ventilation. The building has been thermally modelled to ensure that it passes the CIBSE TM52 overheating assessment.

On Site Renewables

The proposals include renewable sources of energy through the use of Air Source Heat Pumps (ASHP's) and roof mounted Photovoltaic (PV) panels, exceeding the Policy SP4 that requires 20% of the site's energy loads to be delivered via renewable technologies.

2. Overheating Assessment

Dynamic Thermal model Overheating assessment has been carried out in accordance with CIBSE TM52. The modelling results are submitted with the planning application and all of the new proposed spaces pass and meet the overheating criteria.

3. BREEAM ASSESSMENT

The project will meet BREEAM 'Very Good' as a minimum, and a BREEAM Shell and Core assessment has been undertaken and is submitted with the application.

B. Water

1. Will water consumption be minimised?

Low water use fittings will be used throughout.

2. Flood Risk

A flood assessment is submitted with the planning application. The school site is not in an area of flood risk

3. Sustainable Urban Drainage Systems

The scheme follows Sustainable Urban Drainage system (SUDs) principles as set out in the Flood Risk Assessment (FRA), Drainage Strategy and drainage drawings submitted with the application.

C. Construction Waste

1. Is the construction company registered with the Considerate Construction Scheme?

Contractors will be registered with the Considerate Construction Scheme and a Site Waste Management Plan will be implemented with targets for construction waste recycling and disposal. A Construction Management Plan (CMP) is submitted with the application.

D. Biodiversity & Urban Greening

1. Biodiversity Net Gain (BNG)

A bio-diversity net gain assessment has been undertaken and a BNG report is submitted with the planning application. The proposals exceed 10% biodiversity net gain as set out in the accompanying reports.

2. Will a European site be affected?

A PEA is submitted with the application. There are no protected species or habitats affected. Biodiversity enhancements are proposed as set out above.

3. Urban Greening

The proposals include enhancement of existing grassed areas and the planting of new trees to achieve the Biodiversity enhancement.

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